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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM P. APPS,
RYAN C. MEERS, and KYLE L. BALTZ

Appeal 2015-001977
Application 13/529,096
Technology Center 3600

Before BRETT C. MARTIN, JILL D. HILL, and BRENT M. DOUGAL, *Administrative Patent Judges*.

HILL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

William P. Apps et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's final decision rejecting claims 1, 2, 4–13, 15, and 17–19. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

BACKGROUND

Independent claims 1, 14[1], and 15 are pending. Independent claim 1, reproduced below, illustrates the claimed invention.

> 1. A pallet assembly comprising:
> an upper deck having an upper panel portion from which a plurality of ribs extend downward, a plurality of channels formed in an underside of the upper deck;
> a plurality of columns below the upper deck;
> a plurality of reinforcement assemblies including a plurality of inner reinforcement members each received within a first outer case, the inner reinforcement members received in the plurality of channels, a plurality of second outer cases received in the channels, the second cases not containing inner reinforcement members therein.

REJECTION[2]

Claims 1, 2, 4–13, 15, and 17–19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ohanesian (US 6,622,642 B2, iss. Sept. 23, 2003) and Valentinsson (US 2008/0143514 A1, pub. June 19, 2008). Final Act. 3.

OPINION

Claims 1, 4–13, 15, and 17–19

Appellants argue claims 1, 4–13, 15, and 17–19 as a group. We select independent claim 1 as representative. 37 C.F.R. § 41.37(c)(1)(iv). Claims 4–13, 15, and 17–19 stand or fall with claim 1.

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[1] Claim 14 is as allowed. Final Act. 1.

[2] The Examiner withdrew the rejection of claims 7 and 9–13 under 35 U.S.C. § 112, second paragraph. Ans. 2.

The Examiner finds that Ohanesian discloses the claimed pallet assembly including, *inter alia*, a plurality of reinforcement assemblies 120 that include an inner metal reinforcement member 122 received in an outer plastic case 124. Final Act. 3. The Examiner finds that Ohanesian does not disclose that its outer plastic case 124 can be used alone as a reinforcement member, but finds that Valentinsson discloses a plastic stiffening profile 7a, 7b that has the same structure as the claimed "second cases" and is employed in the same way as Ohanesian's reinforcement member. *Id.* (citing Valentinsson ¶ 19). The Examiner concludes that it would have been obvious to one skilled in the art to utilize Valentinsson's plastic structures "in place of or as part of [Ohanesian's] reinforcing assemblies . . . to lighten the weight of the pallet assembly while still providing added strength thereto." *Id.*

Appellants argue that the combination of Ohanesian and Valentinsson fails to teach the channels of the pallet assembly receiving a combination of (1) inner reinforcement members with outer cases, and (2) outer cases without inner reinforcement members. Appeal Br. 3. According to Appellants, independent claims 1 and 15 recite some channels being reinforced with inner reinforcement members combined with outer cases, and some channels containing only outer cases. *Id.*[3] This embodiment is discussed in paragraph 42 of Appellants' Specification.

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[3] We note that claim 1 recites "a plurality of channels," the inner reinforcement members with outer cases being received in "the plurality of channels," and the outer cases without inner reinforcement members being received in "the channels." It is unclear how *the* plurality of channels can receive both (1) inner reinforcement members with outer cases, and (2) outer cases without inner reinforcement member.

The Examiner responds that substituting some of Valentinsson's single-layer reinforcement members for the coated metal reinforcement members of Ohanesian is substitution of one known element for the other to yield predictable results. Ans. 3; *see KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (when a structure already known in the prior art "is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result").

Appellants reply that substituting one known element for another might make it obvious to substitute all of Valentinsson's single-layer plastic reinforcement members for all of Ohanesian's coated metal reinforcement members, because such a "straight substitution . . . might yield predictable results." Reply Br. 1. Appellants contend, however, that the selective substitution of Valentinsson's single-layer plastic reinforcement members for Ohanesian's coated metal reinforcement members is not taught by either reference and therefore "is not 'known' and does not 'yield predictable results.'" *Id.* We are not aware of any rule that a combination must be taught by a prior art reference for the combination to yield predictable results. Appellants have not provided any reason why the Examiner's proposed substitution would not yield predictable results — indeed, it would seem that one skilled in the art would understand that using (1) all metal reinforced plastic members would provide better reinforcement with more weight and cost, (2) non-reinforced plastic members would provide less reinforcement with reduced weight and cost, and (3) a combination of metal reinforced plastic member and non-reinforced plastic members would provide an intermediate level of reinforcement, weight, and cost. Lacking an explanation by Appellants to the contrary, we are not persuaded by this

argument. We therefore sustain the rejection of claim 1 as unpatentable over Ohanesian and Valentinsson. Claims 4–13, 15, and 17–19 fall with claim 1.

Dependent Claim 2

Dependent claim 2 recites that "the first outer cases are integrally molded with the columns." The Examiner finds that, although Ohanesian does not disclose the outer cases being integrally molded with the columns, claim 2's product-by-process limitation is entitled to little weight. Final Act. 3–4. The Examiner considers the "integrally molded" limitation to be met by Ohanesian's heat welding or fusing. *Id.* at 4.

Appellants are correct that

> The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product." *See, e.g., In re Garnero*, 412 F.2d 276, 279 . . . (CCPA 1979).

Appeal Br. 4 (citing MPEP § 2113).

Regarding heat welding or fusing, Ohanesian states, in relevant part, that

> The encapsulating thermoplastic material 124 of the reinforcing member 120 is preferably fully compatible with the material used in the manufacture of the upper deck 102 so that the reinforcing member 120 may be heat welded or fused to the upper deck 102 within the peripheral channel 118 to form a unitary object. The definition of the word "fuse" is intend to include a process whereby a molecular structure of one part is cross-linked to a molecular structure of another part.

Ohanesian 9:10–18.

Appellants argue that Ohanesian's heat welding or fusing does not disclose or render obvious the limitation of claim 2, because "'[i]ntegrally molded' plastic parts have distinctive structural characteristics from parts that are heat welded or fused," and one skilled in the art "could distinguish the two when examining a pallet, such as by sectioning the pallet at the connection point, if necessary." Appeal Br. 4. Appellants further argue that Ohanesian's pallet is thermoformed, and it would be "difficult if not impossible to thermoform outer cases integrally with the columns in Ohanesian." *Id.*

Appellants have not explained how Ohanesian's heat welding or fusing, which crosslinks a molecular structure of one part is cross-linked to a molecular structure of another part to form a unitary object, does not meet the "structure implied by the process step[]" of integrally molding as required by *Garnero*. Appellants also have not explained how thermoforming in Ohanesian prevents it's pallet assembly from meeting the "structure implied by the process step[]" of integrally molding or is incapable of providing the same structure as integral molding. We therefore are not persuaded by this argument, and we sustain the rejection of claim 2 as unpatentable over Ohanesian and Valentinsson.

DECISION

We AFFIRM the rejection of claims 1, 2, 4–13, 15, and 17–19 under 35 U.S.C. § 103(a) as unpatentable over Ohanesian and Valentinsson.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). See 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED